

## Bibliografia

- [ABR91] N. Audsley, A. Burns, M. F. Richardson, A. J. Wellings. *Hard Real-Time Scheduling: The Deadlin- Monotonic Approach*. Proceedings of the 8th IEEE Workshop on Real-Time Operating Systems and Software, pp. 133-137, May 1991.
- [AnP93] C. André, M-A. Peraldi. *Synchronous Approach to Industrial Process Control*, Technical Report N° 93-10, Laboratoire I3S, Université de Nice, March 1993.
- [ARS91] K. Arvind, K. Ramamritham, J. Stankovic, *A Local Area Network Architecture for Communication in Distributed Real-Time Systems*. The Journal of Real-Time Systems, 3, pp. 115 – 147, 1991.
- [AuB90] N. Audsley, A. Burns, *Real-Time System Scheduling*, on First Year Report Task B of the Esprit BRA Project 3092: Predictably Dependable Computing Systems, Chapter 2, vol2. of 3, May 1990.
- [Aud93] N. Audsley, *Flexible Scheduling of Hard Real-Time Systems*. PhD Thesis, Department of Computer Science, University of York, UK, 1993.
- [Bak91] T. P. Baker. *Stack-Based Scheduling of Realtime Processes*. The Journal of Real-Time Systems, Vol. 3, pp. 67-90, 1991.
- [BCH95] E. Byler, W. Chun, W. Hoff, D. Layne. *Autonomous Hazardous Waste Drum Inspection Vehicle*, IEEE Robotics & Automation Magazine, March 1995.
- [BCJ97] F. Balarin, M.Chiodo, A. Jureska, H. Hsieh, A. L. Lavagno, C. Passerone, A. Sangiovanni-Vincentelli, E. Sentovich, K. Suzuki e B. Tabbara. *Hardware-Software Co-Design of Embedded Systems: The Polis Approach*, Livro a ser publicado por Kluwer Academic Press, 1997.
- [BCL99] A. Benveniste, B. Caillaud, P. Le Guernic. *Compositionality in dataflow synchronous languages: specification & distributed code generation*, in Journal Information and Computation, 1999.
- [BCN95] G.Bucci, M. Campanai, P. Nesi. *Tools for Specifying Real-Time Systems*, Journal of Real-Time Systems, pp. 173-198, 1995.
- [BeB91] A Benveniste, G. Berry, *The Synchronous Approach to Reactive and Real-Time Systems*, Proceedings of the IEEE, vol 79 (9), pp1270-1282, sept. 1991.

- [BeB97] G. Bernat, A. Burns, *Combining (n m)-Hard Deadlines and Dual Priority Scheduling*, In Proceedings. of the 18th IEEE Real-Time Systems Symp. , December 1997.
- [BeC99] A. Benveniste, P. Caspi. *Distributing synchronous programs on a loosely synchronous, distributed architecture*, Rapport de Recherche Irisa, N°1289, Décembre 1999.
- [BeG92] G. Berry, G. Gonthier, *The Esterel Synchronous Programming Language: Design, Semantics, Implementation*, Science of Computer Programming vol. 19, n°2, pp 87-152, 1992.
- [Ber89] G. Berry, *Real-Time Programming: Special Purpose or General Purpose Languages*, In Information Processing 89, pp11-17, Ed. Elsevier Science Publishers, 1989.
- [Ber92] G. Berry. *Esterel on Hardware*, on Philosophical Transactions Royal Society of London A, vol 339, pp. 87-104, 1992.
- [Ber98] G. Berry, *The Foundations of Esterel*, In Proof, Language and Interaction: Essays in Honour of Robin Milner, G.Plotkin, C. Stirling and M.Toft (editors), Ed. MIT Press, 1998.
- [Ber99] G. Berry, *The Esterel v5 Language Primer*, Esterel Reference Manual. 1999.
- [BNT93] A. Burns, M. Nicholson, K.W.Tindell, N. Zhang. *Allocation and Scheduling Hard Real-Time Tasks on a point-to-point Distributed System*. Proceedings of the Workshop on Parallel and Distributed Real-Time Systems, pp. 11-20, Dana Point, CA, 1993.
- [BoS91] F. Boussinot, R. de Simone, *The Esterel Language: Another Look at Real-Time Programming*, Proceedings of the IEEE, vol. 79, pp 1293-1304, sept. 1991.
- [BoS96] F. Boussinot, R. de Simone, *The SL Synchronous Language*, IEEE Transactions Software Engineering, vol. 22 (4), pp256-266, april 1996.
- [Bud94] R. Budde. *Esterel Applied to the Case Study Production Cell*, in FZI Publication (chap. 4) intitled "Case Study Production Cell: A Comparative Study in Formal Software Development", Forschungszentrum Informatik Karlsruhe, 1994.
- [But97] G.C. Buttazzo, *Hard Real-Time Computing Systems: Predictable Scheduling Algorithms and Applications*, Ed. Kluwer Academic Publishers, 1997.
- [BuW97] A. Burns, A. Wellings, *Real-Time Systems and Programming Languages*, Second edition. Addison-Wesley,1997.

- 
- [CaB97] M. Caccamo, G. Butazzo, *Exploiting Skips in Periodic Tasks for Enhancing Aperiodic Responsiveness*, In Proc. of the 18th IEEE RTSS, Dec. 1997.
- [CaK88] D. Callahan, K. Kennedy. *Compiling Programs for Distributed Memory Multiprocessors*, Journal Supercomputing, Vol. 2, pp. 151-169, 1988.
- [CER92] E. Coste-Manière, B. Espiau, E. Rutten. *Task-level programming combining object-oriented design and synchronous approach*, in IEEE International Conference on Robotics and Automation, pp. 2751-2756, Nice, May 1992.
- [CGP99] P. Caspi, A. Girault, D. Pilaud. *Automatic Distribution of Reactive Systems for Asynchronous Networks of Processors*, IEEE Transactions on Software Engineering, vol. 25, N° 3, pp. 416-427, May/June 1999.
- [CLL90] J.-Y. Chung, J. W. S. Liu, K. -J. Lin, *Scheduling Periodic Jobs that Allow Imprecise Results*, IEEE Transactions on Computer, 39(9), pp.1156-1174, 1990.
- [Coo96] J. E. Cooling. *Languages for the Programming of Real-Time Embedded Systems - A Survey and Comparison*, Microprocessors and Microsystems, 20, pp. 67-77, 1996.
- [Cos 89] E. Coste-Manière. *Utilisation d'Ésterel dans un contexte asynchrone: una application robotique*, Rapport de Recherche INRIA N° 1139, Dec 1989.
- [CSR88] S. Cheng, J. A. Stankovic, K. Ramamrithan, *Scheduling Algorithms for Hard Real-Time Systems: A Brief Survey*. In Hard Real-Time Systems: Tutorial, Ed. J. A. Stankovic and K. Ramamrithan, pp. 150-173, IEEE Computer Society Press, 1988.
- [DEL91] DELTA-4, *Real-Time Concepts*, on Delta-4 Architecture Guide, Cap.5, pp.102-124, 1991.
- [DTB93] R. I. Davis, K. W. Tindell, A. Burns. *Scheduling Slack Time in Fixed Priority Pre-emptive Systems*. Proceedings of the IEEE Real-Time Systems Symposium, pp. 222-231, 1993.
- [ENS99] J. Euler, M. do C. Noronha, D. M. da Silva, *Estudo de Caso: Desempenho do Sistema Operacional Linux para Aplicações Multimídia em Tempo Real*, Anais do II Workshop de Tempo Real, Salvador-BA, 25-28 de maio de 1999.
- [FeC97] C. Fetzer, F. Cristian, *Integrating External and Internal Clock Synchronization*, The Real-Time Systems Journal, pp.123-171, dez 1997.

- [Fid98] C. J. Fidge. *Real-Time Schedulability Tests for Preemptive Multitasking*. Journal of Real-Time Systems Vol 14. pages 61-93, 1998.
- [GaJ79] M. R. Garcey, D.S.Johnson. *Computer and Intractability: a Guide to the Theory of the NP-Completeness*. W.H.Freeman and Company,1979.
- [Gal95] B. O. Gallmeister. *POSIX.4 Programming for the Real World*. O'Reilly & Associates, ISBN 1-56592-074-0, 1995.
- [GeR91] N. Gehani, K. Ramamritham. *Real-Time Concurrent C: a Language for Programming Dynamic Real-Time Systems*, Journal of Real-Time Systems, vol. 3, 1991.
- [GLM94] T. Gautier, P. LeGuernic, O. Maffei. *For a New Real-Time Methodology*, Rapport de Recherche Inria, No2364, Octobre 1994.
- [GNM97] M. Gergeleit, E. Nett, M. Mock, *Supporting Adaptive Real-Time Behavior in CORBA*, Proceedings. of the First IEEE Workshop on Middleware for Distributed Real-Time Systems and Services. San Francisco, CA, Dec. 1997.
- [Gus94] J. Gustafsson, *Calculation of Execution Times in Object-Oriented Real-Time Software – A Study Focused on RealTimeTalk*, PhD Thesis, Royal Institute of Technology, Suécia, 1994.
- [Har94] M. G. Harnon, et al. *A Retargetable Technique for Predicting Execution Time of Code Segments*, The Journal of Real-Time Systems, Vol. 7, pp 157-182, 1994.
- [HaR95] M. Hamdaoui, P. Ramanathan, *A Dynamic Priority Assignment Technique for Streams com deadline (m,k)-firms*, In IEEE Transactions on Computer, April 1995.
- [Har87] D. Harel. *Statecharts: a Visual Approach to Complex Systems*, Science of Computer Programming, vol 8, pp231-274, 1987.
- [HCR91] N. Halbwachs, P.Caspi, D. Pilaud. *The Synchronous Dataflow Programming Language Lustre*, Another Look at Real Time Programming, Proc. of the IEEE, vol. 79, sept. 1991.
- [HeM96] C. Heitmeyer, D. Mandrioli (eds). *Formal Methods for Real-Time Computing*, Ed. Wiley – Trends in Software (5).
- [HSP98] R. Hill, B. Srinivasan, S. Pather, D. Niehaus. *Temporal Resolution and Real-Time Extensions to Linux*. Technical Report ITTC-FY98-TR-11510-03, Information and Telecommunication Technology Center, Electrical Engineering and Computer Science Department, University of Kansas, 1998.

- 
- [JeS93] K. Jeffay, D. L. Stone. *Accounting for Interrupt Handling Costs in Dynamic Priority Task Systems*. Proceedings of the IEEE Real-Time Systems Symposium, pp. 212-221, December 1993.
- [JLT85] E. Jensen, C. Locke, H. Tokuda. *A Time-Driven Scheduling Model for Real-Time Operating Systems*, Proceedings of the 6<sup>th</sup> IEEE RTSS, pp.112-122, Dec. 1985.
- [JoP86] M. Joseph, P. Pandya. *Finding Response Times in a Real-Time System*. BCS Computer Journal Vol 29, N<sup>o</sup> 5, pp. 390-395, 1989.
- [Jos91] M. Joseph. *Problems, Promises and Performance: Some questions for real-time system specification*, on Proceedings of Rex Workshop on Real-Time: Theory in Practice, Lecture Notes in Computer Science N<sup>o</sup> 600, June 1991, pp.315-324, Ed. Springer-Verlag.
- [Kic97] G. Kiczales, et al. *Aspect-Oriented Programming*, Proceedings of the ECOOP'97, Spring-Verlag LNCS, No 1241, Finlândia, Junho de 1997.
- [Kop92a] H. Kopetz, *Sparse Time versus Dense Time in Distributed Real-Time Systems*, on Proceedings of 12<sup>th</sup> International Conference on Distributed Computing Systems ICDCS'12, pp.460-467, June 1992, Yokohama (Japan).
- [Kop92b] H. Kopetz. *Real-Time and Real-Time Systems*, on Proceedings of Advanced Course on Distributed Systems, July 1992, Estoril (Portugal).
- [Kop92c] H. Kopetz, *Scheduling*. on Proceedings of Advanced Course on Distributed Systems, July 1992, Estoril (Portugal).
- [Kop97] H. Kopetz. *Real-Time Systems. Design Principles for Distributed Embedded Applications*. Kluwer Academic Publishers,1997.
- [KoS95] G. Koren, D. Shasha, *Skip-Over: Algorithms e Complexity for Overloaded Systems that Allow Skips*, In Proceedings of the 16th IEEE RTSS, Pisa, Italy, December 1995.
- [KSt86] E. Kligerman, A. Stoyenko. *Real-Time Euclid: A Language for Reliable Real-Time Systems*. IEEE Transactions on Software Engineering, 12(9), September 1986.
- [KuM97] T. Kuo, A. K. Mok, *Incremental Reconfiguration e Load Adjustment in Adaptive Real-Time Systems*, IEEE Trans. on Computers, Vol. 46, No. 12, Dec. 1997.
- [LeL90] G. Le Lann. *Critical Issues for the Development of Distributed Real-Time Computing Systems*, Rapport de Recherche INRIA N<sup>o</sup> 1274, Août 1990.

- [LeR92] J. P. Lehoczky, S. Ramos-Thuel. *An Optimal Algorithm for Scheduling Soft-Aperiodic Tasks in Fixed-Priority Preemptive Systems*. Proceedings of the IEEE Real-Time Systems Symposium, pp. 110-123, 1992.
- [LeW82] J. Y. T. Leung, J. Whitehead. *On the Complexity of Fixed-Priority Scheduling of Periodic, Real-Time Tasks*. Performance Evaluation, 2 (4), pp. 237-250, december 1982.
- [Li95] G. Li, *An Overview of Real-Time ANSAware 1.0*, Document APM. 1285.01, March 1995.
- [LiL73] C. L. Liu, J.W.Layland. *Scheduling Algorithms for Multiprogramming in a Hard-Real-Time Environment*. Journal of the ACM, Vol. 20, No. 1, pp. 46-61, january 1973.
- [LSL94] J. W. S. Liu, W. Shih, K.-J. Lin, R. Bettati, J.-Y. Chung. *Imprecise Computing*. Proceedings of the IEEE, Vol. 82, N° 1, pp. 83-94, January 1994.
- [LLG91] P. Le Guernic, M. Le Borgne, T. Gauthier, C. Le Maire, *Programming Real Time Applications with Signal*, Another Look at Real Time Programming, Proc. of the IEEE, vol. 79, sept. 1991.
- [LSD89] J. P. Lehoczky, L. Sha, Y. Ding. *The Rate Monotonic Scheduling Algorithm: Exact Characterization and Avarage-Case Behavior*. Proceedings of the IEEE Real-Time Systems Symposium, pp.166-171, Los Alamitos, CA, December 1989.
- [LSS87] J. P. Lehoczky, L. Sha, J.K. Strosnider. *Enhanced Aperiodic Responsiveness in Hard Real-Time Environments*. Proceedings of IEEE Real-Time Systems Symposium, San Jose, CA, pp. 261-270, 1987.
- [Mae87] P. Maes, *Concepts and Experiments in Computational Reflection*, Proceedings of OOPSLA'87, pp. 147-155, 1987.
- [Maf93] O. Maffeis. *Ordonnancements de Graphes de Flots Synchrones; Application a la Mise en Oeuvre de Signal*, Tese de Doutorado, Universidade de Rennes I, France, Jan.1993.
- [MFO99] C. Montez, J. Fraga, R. S. Oliveira, J-M. Farines, *An Adaptive Scheduling Approach in Real-Time CORBA*, 2nd IEEE International Symposium on Object-oriented Real-time Distributed Computing - ISORC'99, Saint-Malo, France, May 1999.
- [Mil80] R. Milner, *A Calculus of Communicating Systems*, Lecture Notes in Computer Science, vol 92, 1980, Ed. Springer-Verlag.

- 
- [Mot92] L. Motus, *Time Concepts in Real-Time Software*, on Proceedings of International Workshop on Real-Time Programming WRTP'92, June 1992, Bruges (Belgium).
- [OIF97] R. S. Oliveira, J. S. Fraga, *Escalonamento de Tarefas com Relações Arbitrárias de Precedência em Sistemas Tempo Real Distribuídos*, 16° Simpósio Brasileiro de Redes de Computadores, SBC, Rio de Janeiro-RJ, 25-28 de maio de 1998.
- [OMG98] OMG, *Realtime CORBA - Joint Revised Submission*, Object Management Group (OMG), Document orbos/98-10-05, October 1998.
- [Ort99] S. Ortiz Jr, *The Battle Over Real-Time Java*, IEEE Computer, Vol. 32, No. 6, pp. 13-15, June 1999.
- [Pin95] M. Pinedo, *Scheduling: Theory, Algorithms and Systems*. Prentice-Hall, 1995.
- [POS97] A. Pascoal, P. Oliveira, C. Silvestre, A. Bjerrum, A. Ishoy, J.-P. Pignon, G. Ayela, C. Petzelt. *MARIUS: An Autonomous Underwater Vehicle for Coastal Oceanography*, IEEE Robotics & Automation Magazine, December 1997.
- [Raj91] R. Rajkumar. *Synchronization in Real-Time Systems: A Priority Inheritance Approach*. Kluwer Academic Publishers, 1991.
- [RaS94] K. Ramamrithan, J. A. Stankovic. *Scheduling Algorithms and Operating Systems Support for Real-Time Systems*. Proceedings of the IEEE, Vol. 82, N° 1, pp. 55-67, January 1994.
- [Ray91] M. Raynal, *La Communication et le Temps dans les Réseaux et les Systèmes Répartis*, Cap.8 et 9, 1991, Ed. Eyrolles.
- [RNS93] U. Rembold, B. O. Nnaji, A. Storr, *Computer Integrated Manufacturing and Engineering*, Addison-Wesley Publishing Company, ISBN 0-201-56541-2, 1993.
- [Rus93] J. Rushby. *Formal Methods and the Certification of Critical Systems*, Technical Report CSL-93-7, disponível em <http://www.csl.sri.com>, 1993.
- [SBS93] S. Ramesh, G. Berry, R.K. Shyamasundar. *Communicating Reactive Processes*, in Proceedings of 20<sup>th</sup> ACM Conference on Principles of Programming Languages, 1993.
- [SeR98] B. Selic, J. Rumbaugh. *Using UML for Modeling Complex Real-Time Systems*, artigo disponível em <http://www.rational.com>, 1998.
- [SGW94] B. Selic, G. Gullekson, P. Ward. *Real-Time Object-Oriented Modeling*, Ed. Wiley – Wiley Professional Computing.

- [SiG98] A. Silberschatz, P. B. Galvi, *Operating System Concepts*, Addison-Wesley, 5th edition, ISBN 0-201-59113-8, 1998.
- [SpB96] M. Spuri, G.C. Buttazzo. *Scheduling Aperiodic Tasks in Dynamic Priority Systems*. Journal of Real-Time Systems Vol 10 N° 2, 1996.
- [SPG97] S. Shenker, C. Partridge, and R. Guerin, *Specification of Guaranteed Quality of Service*. RFC 2212, IETF Specification, 1997.
- [SPH98] B. Srinivasan, S. Pather, R. Hill, F. Ansari, D. Niehaus. A Firm Real-Time System Implementation Using Commercial Off-The-Shelf Hardware and Free Software. Proc. of the Real-Time Technology and Applications Symposium, june 1998.
- [Spu96] M. Spuri. *Analysis of Deadline Scheduled Real-Time Systems*, Technical Report, INRIA, França N° 2776, Janeiro 1996.
- [SRL90] L. Sha, R. Rajkumar, J. P. Lehoczky. *Priority Inheritance Protocols: An approach to Real-Time Synchronization*. IEEE Transactions on Computers, Vol. 39, No. 9, pp. 1175-1185, september 1990.
- [SSL89] B. Sprunt, L. Sha, J. Lehoczky. *Aperiodic Task Scheduling for Hard-Real-Time Systems*. The Journal of Real-Time Systems, Vol. 1, pp. 27-60, 1989.
- [Sta88] J. A. Stankovic, *Misconceptions about real-time computing*, IEEE Computer, vol 21 (10), October 1988.
- [Sta96] J. Stankovic et al. *Strategic Directions in Real Time and Embedded Systems*, ACM Computing Surveys, Vol. 28, No 4, pp. 751-763, December 1996.
- [STB96] E. Sentovich, H. Toma, G. Berry. *Latch Optimization in Circuits Generated from High-level Descriptions*, in Proceedings of International Conference on Computer-Aided Design (ICCAD), 1996.
- [StR88] J. A. Stankovic, K. Ramamrithan, (Editors) *Tutorial on Hard Real-Time Systems*, 1988, IEEE Computer Society Press.
- [StR90] J. A. Stankovic, K. Ramamrithan, *What is predictability for Real-Time Systems?*, The Journal of Real Time Systems, vol.2, pp.247-254, 1990, Ed. Kluwer Academic Publications.
- [TaT92] K. Takashio, M. Tokoro, *DROL: An Object-Oriented Programming Language for Distributed Real-Time Systems*, Proceedings of OOPSLA'92, 1992.
- [TaT93] K. Takashio, M. Tokoro, *Time Polymorphic Invocation: A Real-Time Communication Model for Distributed Systems*, In Proceedings of the IEEE WPDRTS'93, 1993.



- 
- [TaW97] A. S. Tanenbaum, A. S. Woodhull, *Sistemas Operacionais Projeto e Implementação*, Bookman, segunda edição, ISBN 85-7307-530-9, 1997.
- [TBU98] M. Timmeman, B. V. Beneden, L. Uhres. *RTOS Evaluation Kick Off* Real-Time Magazine, 1998-Q33, <http://www.realtime-info.be>, (atualmente Dedicated Systems Magazine), 1998.
- [TBW94] K. W. Tindell, A. Burns, A.J. Wellings. *An Extendible Approach for Analyzing Fixed Priority. Hard Real-Time Tasks*. Journal of Real-Time Systems 6(2). pages 133-151, 1994.
- [TiC94] K. W. Tindell, J. Clark. *Holistic Schedulability Analysis for Distributed Hard Real-Time Systems*. Microprocessors and Microprogramming Vol. 40, 1994.
- [Vah96] U. Vahalia, *Unix Internals - The New Frontiers*, Prentice-Hall, ISBN 0-13-101908-2, 1996.
- [Vie99] J. E. Vieira. *LINUX-SMART: Melhoria de Desempenho para Aplicações Real-Time Soft em Ambiente Linux*. Dissertação de mestrado. Instituto de Matemática e Estatística, Universidade de São Paulo, Outubro de 1999.
- [VRC97] P. Veríssimo, L. Rodrigues, A. Casimiro, *CesiumSpray: A Precise and Accurate Global Time Service for Large-scale Systems*, The Journal of Real-Time Systems, 12, pp.243-294, dez 1997.
- [WaL99] Y.-C. Wang, K.-J. Lin. *Implementing a General Real-Time Scheduling Framework in the RED-Linux Real-Time Kernel*. Proc. of the Real-Time Systems Symposium, December 1999.
- [Wur99] P. Wurmsdobler. *A Simple Control Application with Real-Time Linux*, Real-Time Linux Workshop, Vienna, 1999.
- [XuP93] J. Xu, D. L. Parnas. *On Satisfying Timing Constraints in Hard Real-Time Systems*. IEEE Transaction on Software Engineering, Vol. 19, N° 1, pp. 70-84, January 1993.
- [YoB99] V. Yodaiken, M. Barabanov. *RT-Linux Version Two*, Real Time Linux Workshop, <http://www.thinkingnerds.com/projects/rtl-ws/rtl-ws.html>, Vienna, 1999.
- [You82] S. J. Young, *Real-Time Languages Design and Development*, Ellis-Harwood Ed., 1982.
- [ZhB94] S. Zhang, A. Burns. *Timed Properties of the Timed Token Protocol*. Technical Report YCS 243. University of York, UK, 1994.